

Title (en)  
Instrument for the measurement of optical scattering matrices.

Title (de)  
Instrument zum Messen der optischen Streuungsmatrizen.

Title (fr)  
Instrument pour mesurer des matrices de diffusion optique.

Publication  
**EP 0324311 A2 19890719 (EN)**

Application  
**EP 88500131 A 19881230**

Priority  
• ES 8800024 A 19880107  
• ES 8800025 A 19880107

Abstract (en)  
This instrument carries out the measurement of optical scattering matrices of material samples by means of the detection, and subsequent computer Fourier analysis of a periodic intensity signal of a light beam, emitted by a dye-laser (F) or a polychromatic source-monochromator set (F), that passes through the following ordered elements: a first polarizer (P-1), a first rotating optical retarder (R-1), the sample (S), a second rotating optical retarder (R-2) and a second polarizer (P-2). The light source, the first polarizer and the first rotating optical retarder are arranged on a first optical bench, while the second rotating retarder, the second fixed polarizer and the detector are arranged on a second optical bench. The rotation of both optical retarders, the selection of different wavelengths of the light beam and the selection of different angular orientations of the benches are automatically performed by means of computer controlled motors and positioners.

IPC 1-7  
**G01M 11/02; G01N 21/21**

IPC 8 full level  
**G01N 21/21** (2006.01)

CPC (source: EP)  
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